



BILL RICHARDSON
GOVERNOR

State of New Mexico
ENVIRONMENT DEPARTMENT

Surface Water Quality Bureau
Harold Runnels Building Room N2050
1190 St. Francis Drive - Zip 87505
P.O. Box 26110 - Zip 87502-6110
Santa Fe, New Mexico
Telephone (505) 827-0187
Fax (505) 827-0160
www.nmenv.state.nm.us



RON CURRY
SECRETARY

CINDY PADILLA
DEPUTY SECRETARY

Certified Mail - Return Receipt Requested

May 1, 2007

Mr. Terry Fletcher, President
Rio Algom Mining LLC
P.O. Box 218
Grants, New Mexico 87020

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6WQ-P

RE: Compliance Evaluation Inspection, Rio Algom Mining/Ambrosia Lake Facility, NPDES #NM0020532, April 24, 2007

Dear Mr. Fletcher:

Enclosed, please find a copy of the report for the referenced inspection that the New Mexico Environment Department (NMED) conducted at your facility on behalf of the U.S. Environmental Protection Agency (USEPA). This inspection report will be sent to the USEPA in Dallas, for their review. These inspections are used by USEPA to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permitting program in accordance with requirements of the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report, correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both USEPA and NMED regarding modifications and compliance schedules.

My thanks for the help and cooperation of Mr. Peter Luthiger, during this inspection. If you have any questions, please feel free to contact me at the above address or by telephone at (505) 827-2798.

Sincerely,

Richard E. Powell
Surface Water Quality Bureau

cc: Marcia Gail Bohling, USEPA (6EN-AS)
USEPA, NPDES Permits Branch (6WQ-P)
NMED, District V, Grants by email

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Form Approved
OMB No. 2040-0003
Approval Expires 7-31-85

NPDES Compliance Inspection Report

Section A: National Data System Coding

Transaction Code				NPDES										yr/mo/day				Inspec. Type		Inspector		Fac Type						
1	N	2	5	3	N	M	0	0	2	0	5	3	2	11	12	0	7	0	4	2	4	17	18	C	19	S	20	2
Remarks																												
U R A N I U M F A C I L I T Y																												
Inspection Work Days				Facility Evaluation Rating				BI		QA		Reserved																
67				69	70	5			71	N	72	N	73			74	75											80

Section B: Facility Data

Name and Location of Facility Inspected (For industrial users discharging to POTW, also include POTW name and NPDES permit number) RIO ALGOM MINING LLC/AMBROSIA LAKE FACILITY, P.O. BOX 218 GRANTS, NM. 87020 (A DELAWARE LLC, SUBSIDIARY OF BHP BILLITON) 14.6 MILES NORTH OF MILAN ON NM605, 5.1 MILES WEST ON NM509, 3 MILES ON LEFT McKINLEY COUNTY		Entry Time /Date 1230/4-24-07	Permit Effective Date 2-1-2006
		Exit Time/Date 1620/4-24-07	Permit Expiration Date 1-31-11
Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s) PETER LUTHIGER, MANAGER OF ENVIRONMENTAL AFFAIRS 505-287-8851 (EXT. 205)		Other Facility Data 001 - LAT 35 22 36.7 LONG -107 48 24.4	
Name, Address of Responsible Official/Title/Phone and Fax Number TERRY FLETCHER, PRESIDENT, RIO ALGOM MINING LLC, P.O. BOX 218, GRANTS, NM 87020 505-287-8851		Contacted Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 001A- LAT 35 23 24.5 LONG -107 49 18.3	

Section C: Areas Evaluated During Inspection (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

S	Permit	S	Flow Measurement	S	Operations & Maintenance	N	CSO/SSO
S	Records/Reports	N	Self-Monitoring Program	N	Sludge Handling/Disposal	N	Pollution Prevention
S	Facility Site Review	N	Compliance Schedules	N	Pretreatment	N	Multimedia
S	Effluent/Receiving Waters	N	Laboratory	N	Storm Water	N	Other:

Section D: Summary of Findings/Comments (Attach additional sheets if necessary)

1. PRESIDENT OF RIO ALGOM MINING CHANGED FROM BRUCE LAW TO TERRY FLETCHER BY LETTER TO EPA, REGION 6 DATED 11-16-05
2. SEE REPORT AND FURTHER EXPLANATIONS

Name(s) and Signature(s) of Inspector(s) RICHARD E. POWELL	Agency/Office/Telephone/Fax NMED/SWQB 505-827-2798	Date 5-1-07
Signature of Management QA Reviewer [Signature]	Agency/Office/Phone and Fax Numbers NMED/SWQB 505-476-1864	Date May 1, 2007

SECTION A - PERMIT VERIFICATION

PERMIT SATISFACTORILY ADDRESSES OBSERVATIONS
DETAILS:☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO.)

1. CORRECT NAME AND MAILING ADDRESS OF PERMITTEE

☒ Y ☐ N ☐ NA

2. NOTIFICATION GIVEN TO EPA/STATE OF NEW DIFFERENT OR INCREASED DISCHARGES

☐ Y ☐ N ☒ NA

3. NUMBER AND LOCATION OF DISCHARGE POINTS AS DESCRIBED IN PERMIT

☒ Y ☐ N ☐ NA

4. ALL DISCHARGES ARE PERMITTED

☒ Y ☐ N ☐ NA

SECTION B - RECORDKEEPING AND REPORTING EVALUATION

RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT.
DETAILS: NO DISCHARGE SINCE NOVEMBER 2005☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO.)

1. ANALYTICAL RESULTS CONSISTENT WITH DATA REPORTED ON DMRs. NO DISCHARGE DMR'S

☒ Y ☐ N ☐ NA

2. SAMPLING AND ANALYSES DATA ADEQUATE AND INCLUDE.

☐ S ☐ M ☐ U ☒ NA

a) DATES, TIME(S) AND LOCATION(S) OF SAMPLING

☐ Y ☐ N ☒ NA

b) NAME OF INDIVIDUAL PERFORMING SAMPLING

☐ Y ☐ N ☒ NA

c) ANALYTICAL METHODS AND TECHNIQUES.

☐ Y ☐ N ☒ NA

d) RESULTS OF ANALYSES AND CALIBRATIONS.

☐ Y ☐ N ☒ NA

e) DATES AND TIMES OF ANALYSES.

☐ Y ☐ N ☒ NA

f) NAME OF PERSON(S) PERFORMING ANALYSES.

☐ Y ☐ N ☒ NA

3. LABORATORY EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS ADEQUATE.

☐ S ☐ M ☐ U ☒ NA

4. PLANT RECORDS INCLUDE SCHEDULES, DATES OF EQUIPMENT MAINTENANCE AND REPAIR.

☐ S ☐ M ☐ U ☒ NA

5. EFFLUENT LOADINGS CALCULATED USING DAILY EFFLUENT FLOW AND DAILY ANALYTICAL DATA.

☐ Y ☐ N ☒ NA

SECTION C - OPERATIONS AND MAINTENANCE

TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED.
DETAILS: IX PLANT NO LONGER OPERATED.☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO.)

1. TREATMENT UNITS PROPERLY OPERATED.

☒ S ☐ M ☐ U ☐ NA

2. TREATMENT UNITS PROPERLY MAINTAINED.

☒ S ☐ M ☐ U ☐ NA

3. STANDBY POWER OR OTHER EQUIVALENT PROVIDED.

☒ S ☐ M ☐ U ☐ NA

4. ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE.

☒ S ☐ M ☐ U ☐ NA

5. ALL NEEDED TREATMENT UNITS IN SERVICE.

☒ S ☐ M ☐ U ☐ NA

6. ADEQUATE NUMBER OF QUALIFIED OPERATORS PROVIDED.

☒ S ☐ M ☐ U ☐ NA

7. SPARE PARTS AND SUPPLIES INVENTORY MAINTAINED.

☒ S ☐ M ☐ U ☐ NA

8. OPERATION AND MAINTENANCE MANUAL AVAILABLE.

☒ Y ☐ N ☐ NA

STANDARD OPERATING PROCEDURES AND SCHEDULES ESTABLISHED.

☒ Y ☐ N ☐ NA

PROCEDURES FOR EMERGENCY TREATMENT CONTROL ESTABLISHED.

☒ Y ☐ N ☐ NA

SECTION C - OPERATIONS AND MAINTENANCE (CONT'D)

9. HAVE BYPASSES/OVERFLOWS OCCURRED AT THE PLANT OR IN THE COLLECTION SYSTEM IN THE LAST YEAR?
IF SO, HAS THE REGULATORY AGENCY BEEN NOTIFIED?
HAS CORRECTIVE ACTION BEEN TAKEN TO PREVENT ADDITIONAL BYPASSES/OVERFLOWS?

☐ Y ☒ N ☐ NA
☐ Y ☐ N ☒ NA
☐ Y ☐ N ☒ NA

10. HAVE ANY HYDRAULIC OVERLOADS OCCURRED AT THE TREATMENT PLANT?
IF SO, DID PERMIT VIOLATIONS OCCUR AS A RESULT?

☐ Y ☐ N ☒ NA
☐ Y ☐ N ☒ NA

SECTION D - SELF-MONITORING

PERMITTEE SELF-MONITORING MEETS PERMIT REQUIREMENTS.
DETAILS: NO DISCHARGE SINCE NOVEMBER 2005

☐ S ☐ M ☐ U ☒ NA (FURTHER EXPLANATION ATTACHED NO.)

1. SAMPLES TAKEN AT SITE(S) SPECIFIED IN PERMIT.

☐ Y ☐ N ☒ NA

2. LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES.

☐ Y ☐ N ☒ NA

3. FLOW PROPORTIONED SAMPLES OBTAINED WHEN REQUIRED BY PERMIT.

☐ Y ☐ N ☒ NA

4. SAMPLING AND ANALYSES COMPLETED ON PARAMETERS SPECIFIED IN PERMIT.

☐ Y ☐ N ☒ NA

5. SAMPLING AND ANALYSES PERFORMED AT FREQUENCY SPECIFIED IN PERMIT.

☐ Y ☐ N ☒ NA

6. SAMPLE COLLECTION PROCEDURES ADEQUATE

☐ Y ☐ N ☒ NA

- a) SAMPLES REFRIGERATED DURING COMPOSITING.

☐ Y ☐ N ☒ NA

- b) PROPER PRESERVATION TECHNIQUES USED.

☐ Y ☐ N ☒ NA

- c) CONTAINERS AND SAMPLE HOLDING TIMES CONFORM TO 40 CFR 136.3.

☐ Y ☐ N ☒ NA

7. IF MONITORING AND ANALYSES ARE PERFORMED MORE OFTEN THAN REQUIRED BY PERMIT, ARE
THE RESULTS REPORTED IN PERMITTEE'S SELF-MONITORING REPORT?

☐ Y ☐ N ☒ NA

SECTION E - FLOW MEASUREMENT

PERMITTEE FLOW MEASUREMENT MEETS PERMIT REQUIREMENTS.
DETAILS:

☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO.)

1. PRIMARY FLOW MEASUREMENT DEVICE PROPERLY INSTALLED AND MAINTAINED.
TYPE OF DEVICE 12" PARSHALL FLUMES

☒ Y ☐ N ☐ NA

2. FLOW MEASURED AT EACH OUTFALL AS REQUIRED.

☒ Y ☐ N ☐ NA

3. SECONDARY INSTRUMENTS (TOTALIZERS, RECORDERS, ETC.) PROPERLY OPERATED AND MAINTAINED. STEVENS RECORDERS

☒ Y ☐ N ☐ NA

4. CALIBRATION FREQUENCY ADEQUATE. (DATE OF LAST CALIBRATION) NO FLOW BUT SHOULD SIMULATE FLOW PERIODICALLY
RECORDS MAINTAINED OF CALIBRATION PROCEDURES.
CALIBRATION CHECKS DONE TO ASSURE CONTINUED COMPLIANCE.

☐ Y ☒ N ☐ NA
☐ Y ☐ N ☒ NA
☐ Y ☐ N ☒ NA

5. FLOW ENTERING DEVICE WELL DISTRIBUTED ACROSS THE CHANNEL AND FREE OF TURBULENCE.

☒ Y ☐ N ☐ NA

6. HEAD MEASURED AT PROPER LOCATION.

☒ Y ☐ N ☐ NA

7. FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGE OF FLOW RATES.

☒ Y ☐ N ☐ NA

SECTION F - LABORATORY

PERMITTEE LABORATORY PROCEDURES MEET PERMIT REQUIREMENTS.
DETAILS: NO DISCHARGE SINCE NOVEMBER 2005

☐ S ☐ M ☐ U ☒ NA (FURTHER EXPLANATION ATTACHED NO.)

1. EPA APPROVED ANALYTICAL PROCEDURES USED (40 CFR 136.3 FOR LIQUIDS, 503.8(b) FOR SLUDGES)

☐ Y ☐ N ☒ NA

SECTION F - LABORATORY (CONT'D)

2. IF ALTERNATIVE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED ☐ Y ☐ N ☒ NA3. SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT. ☐ S ☐ M ☐ U ☒ NA4. QUALITY CONTROL PROCEDURES ADEQUATE. ☐ S ☐ M ☐ U ☒ NA5. DUPLICATE SAMPLES ARE ANALYZED. _ % OF THE TIME. ☐ Y ☐ N ☒ NA6. SPIKED SAMPLES ARE ANALYZED. _ % OF THE TIME. ☐ Y ☐ N ☒ NA7. COMMERCIAL LABORATORY USED. ☒ Y ☐ N ☐ NA

LAB NAME ACZ LABORATORIES, INC

LAB ADDRESS 2773 DOWNHILL DRIVE STEAMBOAT SPRINGS, CO 80487 303-879-6590

PARAMETERS PERFORMED ALL BUT pH

SECTION G - EFFLUENT/RECEIVING WATERS OBSERVATIONS. ☒ S ☐ M ☐ U ☐ NA (FURTHER EXPLANATION ATTACHED NO. _).

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	FLOAT SOL.	COLOR	OTHER
001	NO DISCHARGE						
001A	NO DISCHARGE						

RECEIVING WATER OBSERVATIONS

SECTION H - SLUDGE DISPOSAL

SLUDGE DISPOSAL MEETS PERMIT REQUIREMENTS. ☐ S ☐ M ☐ U ☒ NA (FURTHER EXPLANATION ATTACHED NO. _).
DETAILS:1. SLUDGE MANAGEMENT ADEQUATE TO MAINTAIN EFFLUENT QUALITY. ☐ S ☐ M ☐ U ☐ NA2. SLUDGE RECORDS MAINTAINED AS REQUIRED BY 40 CFR 503. ☐ S ☐ M ☐ U ☐ NA

3. FOR LAND APPLIED SLUDGE, TYPE OF LAND APPLIED TO: (e.g., FOREST, AGRICULTURAL, PUBLIC CONTACT SITE)

SECTION I - SAMPLING INSPECTION PROCEDURES

(FURTHER EXPLANATION ATTACHED NO. _).

1. SAMPLES OBTAINED THIS INSPECTION. ☐ Y ☒ N ☐ NA

2. TYPE OF SAMPLE OBTAINED

GRAB COMPOSITE SAMPLE METHOD FREQUENCY

3. SAMPLES PRESERVED. ☐ Y ☐ N ☐ NA4. FLOW PROPORTIONED SAMPLES OBTAINED. ☐ Y ☐ N ☐ NA5. SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE. ☐ Y ☐ N ☐ NA6. SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE. ☐ Y ☐ N ☐ NA7. SAMPLE SPLIT WITH PERMITTEE. ☐ Y ☐ N ☐ NA8. CHAIN-OF-CUSTODY PROCEDURES EMPLOYED. ☐ Y ☐ N ☐ NA9. SAMPLES COLLECTED IN ACCORDANCE WITH PERMIT. ☐ Y ☐ N ☐ NA

**Compliance Evaluation Inspection
Rio Algom Mining LLC
NPDES Permit #NM0020532, April 24, 2007**

Further Explanations

Introduction

On April 24, 2007, a Compliance Evaluation Inspection was conducted at the Rio Algom Mining LLC (RAM)/Ambrosia Lake Facility located near Grants, New Mexico by Richard E. Powell of the State of New Mexico Environment Department (NMED). RAM is classified as a major discharger under the federal Clean Water Act, Section 402 National Pollutant Discharge Elimination System (NPDES) permit program and is assigned permit #NM0020532. This permit allows mine water and storm water discharges to an unnamed tributary to Arroyo del Puerto, thence to San Mateo Creek, thence to the Rio San Jose, thence to the Rio Puerco and thence to the Rio Grande in stream segment 20.6.4.105 NMAC of the Rio Grande Basin.

The NMED performs a certain number of CEI's for the U.S. Environmental Protection Agency (USEPA) each year. The purpose of this inspection is to provide USEPA with information to evaluate the permittee's compliance with the NPDES permit. This report is based on review of files maintained by the permittee and NMED, on-site observation by NMED personnel, and verbal information provided by the permittee's representative.

An entrance interview was conducted with Mr. Peter Luthiger, Manager of Environmental Affairs, at approximately 1230 hours on April 24, 2007. The inspector made introductions, presented his credentials and discussed the purpose of the inspection.

Treatment Scheme

Process wastewater at this facility is produced when mine water is pumped from flooded, underground mines as part of an in-situ leaching process. Recirculation water is pumped regularly through mine section 30 West via pumping stations, into two 1,000,000 gallon holding (steady head) tanks. Gravity flow from these two tanks feeds the ion exchange (IX) plant.

Mine water from these tanks enters the bottom of the IX columns located within the IX plant. Anion resin beads in the column are loaded with uranium extracted from the mine water and the now treated (for uranium) water is decanted from the top of the IX column. This water is discharged from the IX plant through an overflow screen, which is used to collect and return stray resin back to the IX column. Just prior to leaving the plant, discharges are treated with barium chloride for radium removal and are directed to adjacent settlement ponds. Outfall 001A is located at the outlet of these settling ponds and outfall 001 is located in the southeast corner of the mining facility. **This system has not been operated for several years and will likely not be operated under the current ownership of the company. It will be left in-place and may get re-activated in the future.**

Permit/Discharge Status

This temporarily inactive uranium mine is in the reclamation phase. The mill has been removed, tailings are being, or have already been, covered, and rock armoring is being placed where required. The site will be reclaimed per requirements of the Nuclear Regulatory Commission (NRC) license and much of the site will eventually be turned over to the United States Department of Energy (DOE) for long term management. RAM intends to sell, or completely reclaim, the remainder of the site not turned over to DOE. Storm water drainage from this site will continue to discharge via outfall 001 located in the southeast corner of the facility. The current NPDES permit allows discharges of "mine drainage, surface and ground water reclamation waste water, and storm water" from this outfall. Therefore, this NPDES permit will need to be kept active until the site is reclaimed and any state and federal performance bonds have been released. Compliance with, and maintenance of the NPDES permit is required until all storm water discharges associated with industrial activity from the site are eliminated and the site is finally stabilized by vegetation or equivalent stabilization measures have been employed. Although not specified in this permit, at a minimum, revegetation should meet the NPDES Construction General Storm Water Permit (CGP) requirement to establish at least a 70% native vegetative cover for areas to be revegetated (see CGP Part 9.C.1.d and Appendix A - "Final Stabilization").

An exit interview to discuss the findings of this inspection was conducted from approximately 1600 - 1620 hours on April 24, 2007 with Mr. Luthiger, at the mine office.